

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-12 (canceled)

13. (canceled)

14. (currently amended) A two or more component material system for use in 3D-printing comprising:

a first component comprising a liquid solvent,
a second component separate from said first component and
comprising dry binder particles comprising binder soluble in the solvent, and

optionally, filler materials in the form of particles as a third component or in said first or second component,

wherein the material system further contains two complementary polyelectrolytes and/or an initiator for a crosslinking reaction of the binder, and

wherein the two complementary polyelectrolytes are contained separately in

(i) two binders, respectively, or

(ii) in a binder and in the solvent.

15. (previously presented) A material system according to claim 14, wherein the initiator is contained in the solvent or in the one or both binders.

16. (previously presented) A material system according to claim 15, wherein the initiator is a photoinitiator.

17. (previously amended) A material system according to claim 14, wherein the filler particles are coated with the binder.

18. (previously presented) A material system according to claim 14, wherein the material system is residual-ash-poor.

19. (previously presented) A material system according to claim 14, wherein the material system following 3D-printing is flowable in an autoclave.

20. (previously amended) A material system according to claim 14, wherein at least a substantial portion of the filler material and binder particles is in the form of rounded-off particles.

21. (previously presented) A material system according to Claim 20, wherein average particle diameter of said particles is smaller than approximately 40 μm .

22. (previously amended) A two or more component material system for use in 3D-printing comprising:

a first component comprising a solvent,
a second component comprising binder particles soluble in the solvent, and

optionally, filler materials in the form of particles as a third component or in said first or second component,

wherein the material system contains two complementary polyelectrolytes and/or an initiator for a crosslinking reaction of the binder, and

wherein the filler material is comprised of wax, PS, PMMA or POM.

23. (previously presented) A material system according to claim 14, wherein the filler material is comprised of metal, ceramic or carbide.

24. (previously presented) A material system according to claim 14, wherein the binder is comprised of a water-soluble polymer.

25. (previously presented) A material system according to claim 24, wherein the water-soluble polymer is PVP or a copolymer thereof.

26. (currnetly amended) A two or more component material system for use in 3D-printing comprising:

a first component comprising a liquid solvent,
a second component separate from said first component and
comprising dry binder particles comprising binder soluble in the
solvent, and

optionally, filler materials in the form of particles as a
third component or in said first or second component,

wherein the material system further contains two
complementary polyelectrolytes and/or an initiator for a
crosslinking reaction of the binder, and

wherein the binder comprises less than 10 weight percent of
the material system.

27. (previously presented) A process for producing a three
dimensional shape, the process comprising:

(a) providing a layer of [[a]] solvent-soluble dry
particles comprising binder and, optionally, filler materials,

(b) printing said layer with a liquid solvent in a pattern
to activate said binder,

(c) repeating steps (a) and (b) until said three-
dimensional shape is formed,

wherein the material system comprised of binder, solvent
and optionally filler materials contains two complementary
polyelectrolytes and/or an initiator for a crosslinking reaction
of the binder.